#### **ASH GROVE CEMENT COMPANY**



"WESTERN REGION"

January 31, 2007

Mr. Fred Austin Puget Sound Clean Air Agency 110 Union Street, Suite 500 Seattle, WA. 98101-2038

Re: Limestone Elevator Project

Dear Mr. Austin:

Please find enclosed the application for the above project along with a check totaling \$2250.00 This is for the \$750.00 filing fee, and \$500.00 equipment fee for each of the elevator and baghouse and \$500.00 SEPA lead fee. I am also including a copy of the DCLU determination of lead agency.

If you should have any questions, please call me direct at (206) 694-6221.

Yours truly, , >

Gerald J. Brown EHS Manager

Enclosure:

No

No

No

No

## Summary for Project No. 6126907, 3801 EAST MARGINAL WAY S | Pre-Hansen

**Project Details** 

Application Template:

**BLDG** 

Type:

CONSTRUCTN

Description of Work:

Priority:

Type of Work:

Dept. of Commerce:

Address & Dev Site Parcel Details

Work Site Address:

3801 EAST MARGINAL WAY

5

Address Status

Needs DAP assignment?

Needs Addressing RRP?

Needs ARW (except STFIs & mechanicals)?

Needs Addressing Review before scheduling

appointment?

Location:

Development Site Parcel (s):

Parcel ID Status
DV0004723 ACTIVE

**Construction Details** 

Action Type:

Phased Permit:

Ground Disturbance:

Substantial Alteration:

Occupancy:

· Use:

TRAO Applies: Building Code:

Special Flags:

Special Inspections:

**Intake Valuation** 

Alteration:

New:

Declared:

\$0.00

Communication Record

[	Date Entered	Entered By	Note
1	1/29/2007	VanDevender, A.	Customer in to inquire about some work on an IG1 U/85 & UI site with wetland. Customer says that work will be at least 200' from shoreline so it seems no shoreline permit is necessary. Initial proposal is to remove a portion of converyor belt and rework with inclusion of bucket elevator. DPD is not lead agency for this type of permit.

-ASC Visits

Date Contact Activity Workgroup		Workgroup	Description	Seen By	
1/29/2007	jerry brown	Coaching		3801 E marginal way s / air pollution / "who is going to be the lead agency?"	VanDevender, A

Appointments

No appointments.

# Clean Air Agency

### PUGET SOUND CLEAN AIR AGENCY ENGINEERING DIVISION

110 UNION STREET, ROOM 500, Seattle, Washington 98101-2038 (206) 689-4052 Fax: (206) 343-7522 <www.pscleanair.org>

#### Notice of Construction and Application for Approval

Incomplete applications may delay Agency review

			Incomplete a	рриса	ions may actay Agent	cy review							
	FORM P	Be sure before si	to complete items 39, 40, 41, & ubmitting Form P.	43	<b>▼</b> 0 mi	ENCY USE ONLY) N/C NUMBER SIC/NAICS							
1. TYPE	OF BUILDING (Check) v		S OF EQUIPMENT (Check)   Existing	ocation	7. APPLICANT NAME & MA	777-17 - 78							
	PANY (OR OWNER) NAM Ash Gro PANY (OR OWNER) MAIL	ve Cemer		8. APPLICANT EMAIL ADDRESS 3801 East Marginal Way So, Seattle WA 98134 9. INSTALLATION ADDRESS (Include City & Zip Code)									
3	3801 East Marginal V E NUMBER: (206) 623-55	Vay So, S		3801 East Marginal Way So, Seattle WA 98134									
	UMBER: (206) 623-5355	Cen	nent Manufacturing	Dry K	iln								
			TER ONLY NEW EQUIPMENT N COLUMN 'NO OF UNITS.' (										
11. NO. OF UNITS	SPACE HEATERS OR BOILERS	14 NO OF UNITS	OVENS	15. NO OF UNIT		16 NO. OF UNITS	MELTING FURNACES						
(a) 12. NO. OF UNITS (a)	INCINERATORS	(a) (b) (c) (d)	CORE BAKING OVEN PAINT BAKING PLASTIC CURING LITHO COATING OVEN	(a) (b) <u>2</u> (c) (d)	AREAS BULK CONVEYOR CLASSIFIER STORAGE BIN	(a) (b) (c) (d)	POT REVERBERATORY ELECTRIC INDUC/RESIST						
13. NO. OF UNITS (a)	OTHER SYSTEMS DEGREASING, SOLVENT	(e) (f) (g)	DAYER ROASTER KILN	(a) — (b) — (e) —	BAGGING OUTSIDE BULK STORAGE LOADING OR UNLOADING	(g)	CRUCIBLE CUPOLA ELECTRIC ARC						
(c)	ABRASIVE BLASTING OTHER- SYSTEM	(h) (i) (j)	HEAT-TREATING OTHER	(h) (i)	BATCHING MIXER (SOLIDS) OTHER	(h) (i) (j)	OTHER METALLIC GLASS OTHER NON METALLIC						
17. NO. OF UNITS	GENERAL OPER. EQUIP.	17. NO. OF UNITS	GENERAL OPER. EQUIP.	17. NO OF UNIT		18. NO. OF UNITS	OTHER EQUIPMENT						
(a) (b) (c) (d) (e)	CHEMICAL MILLING PLATING DIGESTER DRY CLEANING FORMING OR MOLDING	(f) (g) (h) (i) (j)	GALVANIZING IMPREGNATING MIXING OR FORMULATING REACTOR STILL	(k) (l) (m) (n) (o)	ASPHALT BLOWING CHEMICAL COATING COFFEE ROASTER SAWS & PLANERS STORAGE TANK	(a) (b) (c) (d) (e)	SPRAY PAINTING GUN SPRAY BOOTH OR ROOM FLOW COATING FIBERGLASSING OTHER						
	CONTR	OL DEVIC	ES (ENTER NUMBER OF UN COMPLETE A FORM R			OLUMNS.							
19. NO OF UNITS	CONTROL DEVICE	20. NO. OF UNITS	CONTROL DEVICE	21. NO. OF UNIT:		22. NO. OF UNITS	CONTROL DEVICE						
(a) (b) (c) (d)	SPRAY CURTAIN CYCLONE MULTIPLE CYCLONE INERTIAL COLL OTHER	(a) (b) (c) (d)	AIR WASHER WET COLLECTOR VENTURI SCRUBBER DUST COLLECTOR	(a) (b) (c) (d)	ABSORBER ADSORBER FILTER PADS (FILTERS AFTERBURNER	(a) (b) <u>2</u> (c) (d)	DEMISTER BAGHOUSE Existing ELEC. PRECIPITATOR OTHER						
	EQUIPMENT COST ATE) EXISTING 0		NTROL EQUIPMENT COST TIMATE) EXISTING TING	FROM	LY HOURS AM to PM urs/day	26. DAYS C	OF OPERATION  X X X X  W T F S						
	ATED STARTING DATE O	OF CONSTR	UCTION:		IMATED COMPLETION DAT y 2007	E OF CONST	RUCTION:						

Your application will not be processed unless you mall a \$750 filling fee payment along with this application to this Agency at the address noted at the top of this form. Additional fees may apply after your application is reviewed.

## **Notice of Construction Application**

**FORM P** 

STACKS OR VENTS (LIST NUMBER, TYPE, AND SIZE OF VENT)

	ERIALS (List materials used in process) S (Type and amount)	ANNUAL AMT. UNITS	30. P	RODUCTS (List End Pr	oducts)		JAL PROD. JNITS
(a) Limestone		950000 tons	(a)				
(b)			(b)				
(c)			(c)			-	
31. NO.	DESCRIPTION	32. HEIGHT ABO	OVE	33. VOLUME	DIMENS	IONS (INC	HES)
OF UNITS	OF OPENING	GRADE (FT.	)	EXHAUSTED	34. LENGTH (C	R DIAM)	35. WIDTH
(a)	STACKS (FROM TOP OF UNIT)						
(b)	FLUES						
(c)	PROCESS OR GENERAL EXHAUST						
(d)	PROCESS OR GENERAL VENTS						
(e)	SKYLIGHT OR WINDOW						
(f)	EXHAUST HOOD						
(g)	OTHER						

#### FLOW DIAGRAM

20	CLOW/	DIACDAM	INICEDI	IOTIONIC.
.3D.	FLUVV	DIAGRAM	IIVSTRU	ICHUNS.

- (a) FLOW DIAGRAM MAY BE SCHEMATIC. ALL EQUIPMENT SHOULD BE SHOWN WITH EXISTING EQUIPMENT SO INDICATED.
- (b) SHOW FLOW DIAGRAM OF PROCESS STARTING WITH RAW MATERIALS USED AND ENDING WITH FINISHED PRODUCT.
- (c) IF MORE THAN ONE PROCESS IS INVOLVED TO MAKE FINISHED PRODUCT, SHOW EACH PROCESS AND WHERE THEY MERGE.
- (d) INDICATED ALL POINTS IN PROCESS WHERE GASEOUS OR PARTICULATE POLLUTANTS ARE EMITTED.
- (e) FLOW CHART CAN BE ATTACTED SEPARATELY (F NECESSARY. (DRAWINGS MAY BE SUBMITTED INSTEAD IF DESIRED.)
- (f) SHOW PICKUP AND DISCHARGE POINTS FOR HANDLING OR CONVEYING EQUIPMENT.

(a)	FLOW	DIAGRAM	See	Attachment A
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- 37. PLEASE INCLUDE THE FOLLOWING SUPPORTING MATERIALS WITH THIS APPLICATION:
  - ✓ ENVIRONMENTAL CHECKLIST IS ATTACHED (OR A COPY OF AN APPROVED ENVIORNMENTAL CHECKLIST OR EIS)
  - PROCESS DESCRIPTION
  - VENDOR PRODUCT INFORMATION

38. CERTIFICATION:

I,THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE INFORMATION CONTAINED IN THE APPLICATION AND THE ACOMPANYING FORMS, PLANS, AND SUPPLEMENTAL DATA DESCRIBED HEREIN IS, TO THE BEST OF MY KNOWLEDGE, ACCURATE AND COMPLETE.

39. SJANATURE	——————————————————————————————————————	40. DATE
		1/30/07
41. TYPE OR PRINT NAME	42. TITLE	43. PHONE
Geráld Brown	EHS Manager	(206) 694-6221

#### PROCESS DESCRIPTION:

#### Limestone Bucket Elevator Project

The Limestone Bucket Elevator Project at the Seattle Plant involves the installation of a bucket elevator to transport limestone from the 311.BC3 belt conveyor to the limestone storage bin. This project requires the installation of new equipment (bucket elevator and conveyor). It eliminates several point and fugitive dust sources and will reduce our overall plant dust emission.

Limestone is currently reclaimed from the stockpile onto the 311.BC3 conveyor for transport to the 311.BC4 belt conveyor at Transfer Tower 03 to Transfer Tower 04 (TT 03/04). At this point the limestone is transferred onto belt conveyor 311.BC5 and carried to Transfer Tower 05 (TT 05) where it is placed onto belt conveyor 311.BC7 and carried to Transfer Tower 06 (TT 06). The material is moved by belt conveyor 311.BC8 from TT 06 into the 331 Building and loaded into a storage bin.

The elevator project will replace belt conveyors:

- 1. 311.BC4 from Transfer Tower 03 to Transfer Tower 04
- 2. 311.BC5 from Transfer Tower 04 to Transfer Tower 05
- 3. 311.BC7 from Transfer Tower 05 to Transfer Tower 06

#### The elevator project will

- 1. Eliminate dust collector #311.BF3 on Transfer Tower 05
- 2. Relocate dust collector 311.BF2 from Transfer Tower 03/04 to vent the new Limestone bucket elevator
- 3. Reduce the volume on belt conveyor 311.BC8 (dust collector 311.BF5) by approximately 80%

#### **Emission Estimates**

Old system:	dust collector	grains/ dscf	1	7000 grains/lb	x	cfm	x	60 min/hr	x	8760 hrs/yr	1	2000 lb/ton		tons/ year
<b>T</b> T 3/4	311.BF2	0.005				4800								0.90
TT 5	311.BF3	0.005		_11		3800	H							0.71
TT 6	311.BF5	0.005				9350	- 21						1	1.76
331Tower	311.BF4	0.005			1	10600								1.99
				•								Total		5.36

New system:	dust collector	grains/ dscf	1	7000 grains/lb	x	cfm	x	60 min/hr	x	8760 hrs/yr	1	2000 lb/ton		tons/ year
TT 3/4	311.BF2	0.005				4800								0.90
TT 5	311.BF3	0.005				0							1	0.00
TT 6 @ 20%	311.BF5	0.005				9350								0.35
331Tower	311.BF4	0.005				10600				E-17, 17.11			Ť	3.24
												Total		1.25

Total Emission Reduction = 2.12Tons/year PM10



#### PUGET SOUND CLEAN AIR AGENCY

Additional Notice of Construction Application Requirements for

#### BAGHOUSES AND CARTRIDGE-TYPE DUST COLLECTORS

#### General

Equipment or Process Being Controlled [Specify the source(s) of the particulate matter to be controlled. If the source(s) are also new, complete the applicable permit forms]

**Project: The Limestone Bucket Elevator** 

The Limestone Bucket Elevator project will not require the addition of a new baghouse(s). The new conveyor 311.BC4 at TT3/4 to the bucket elevator will be vented by an existing dust collector #331.BF2 (PSCAA Control #37) that vents the existing 311.BC4 conveyor. The new elevator will be vented by an existing dust collector #331.BF4 (PSCAA Control #25) on the 331 tower. There will be no additional product handled by the elevator that is not already being currently handled by the belts. The project will reduce emissions by eliminating dust collector #311.BF3 (PSCAA Control #20) and associated conveyor belt on Transfer Tower 05 and by reducing the volume of limestone on belt conveyor 311.BC8 vented by dust collector 311.BF5 (PSCAA Control #21) by approximately 80%

Identify which of the following categories the project fits into:



- 1. <u>New Construction</u> (New construction also includes existing, unpermitted equipment or processes) The project will not require new baghouse(s)
- 2. Reconstruction (Reconstruction means the replacement of components of an existing facility to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new facility)
- 3. Modification (Modification means any physical change in, or change in the method of operation of, a source, except an increase in the Hours of Operation or production rates (not otherwise prohibited) or the use of an alternative fuel or raw material that the source is approved to use under an Order of Approval or operating permit, that increases the amount of any air contaminant emitted or that results in the emission of any air contaminant not previously emitted)
- 4. Amendment to Existing Order of Approval Permit Conditions

Estimated Hours of Operation (hr/day, day/wk, wk/yr) [Estimate the hours of operation for the new baghouse - not necessarily the entire facility]

The project will not effect typical hours of operation.

Estimated Installation Date [Estimate the date when the new baghouse will be put into service] The project will not require new baghouse(s)Project completion in May 2006.

Inlet Gas Stream Characteristics [Pretreatment (e.g., heating or dilution) is necessary if the temperature is not 50-100 °F above the dewpoint.]

The project will not require new baghouse(s)

Particulate Concentration (lb/hr, gr/acf, or gr/dscf) [Specify the amount of particulate matter being vented to the baghouse in pounds per hour, grains per actual cubic foot, or grains per dry standard cubic foot. (One pound contains 7000 grains.)]

The project will not change the amount of particulate matter being vented by the current baghouses.

Flowrate (acfm) [Specify the air flowrate in actual cubic feet per minute. This is usually determined from the fan performance 'curve' based upon the expected static pressure caused by the sum of the pressure losses from each component in the ductwork, including the baghouse] The project will not change the air flowrate of the current baghouses.

Average Temperature (°F) [Specify the average expected temperature of the air going into the baghouse in degrees Fahrenheit.]

No change will remain ambient temperature

Maximum Temperature (°F) [Specify the maximum expected temperature of the air going into the baghouse in degrees Fahrenheit.]

No change will remain ambient temperature

Moisture (% by volume) [Specify the moisture (water vapor) concentration of the air going into the baghouse in percent.]

No change will remain ambient temperature

Design [Most design information is available from the manufacturer or vendor. Submittal of a brochure, scale drawing or process and instrumentation diagram will facilitate the review of the permit application]

Make & Model [Specify the manufacturer and model of the baghouse - not the serial number]
The project will not require new baghouse(s)

Filter Fabric Material [Specify the type of fabric material used. Common bag materials include modacrylic (e.g., Dynel), cotton, wool, polypropylene, nylon polyamide (e.g., Nylon 6 & 66), acrylic (e.g., Orlon), polyester (e.g., Dacron, Creslan), nylon aromatic (e.g., Nomex), fluorocarbon (e.g., Teflon, TFE), and fiberglass. Also specify whether it is woven or felted, and any type of treatments (e.g., heat setting) or finishes applied to the fabric (e.g., Teflon, Gore-tex, silicone).]

Filter Cleaning Method [Specify either mechanically shaken, reverse air, or pulse-jet.]

#### The project will not require new baghouse(s)

Air to Cloth Ratio [Specify the air to cloth ratio of the baghouse. This is the airflow (acfm) divided by the total surface area of fabric exposed to dust. The surface area of an individual bag is equal to 3.14159 x bag diameter x bag length. The surface area of a pleated cartridge generally must be obtained from the manufacturer or distributor. The total surface area is just the individual bag or cartridge surface area times the number of bags or cartridges cleaning the exhaust.] (acfm/ft2)

The project will not require new baghouse(s)

Baghouse Configuration [Specify whether the baghouse equipped with an induced draft fan on the clean side (negative pressure) or with a forced draft fan on the dirty side (positive pressure)]

The project will not require new baghouse(s)

Method Used to Design/Size the Baghouse [Specify the method used to select this design and size of baghouse. If design calculations were performed, they should be submitted. If the design and sizing was based on similar (successful) applications, list the facilities and the city and state where they are located]

The project will not require new baghouse(s) Stack

Stack Height (ft) [Specify the height of the top of the stack above ground level - not above the building or sea level]

No change

Stack Diameter or Rectangular Cross-Sectional Dimensions (inches) [Specify the internal dimensions - not the external dimensions]

No change

Exhaust Flowrate (acfm) [Specify the airflow in actual cubic feet per minute]

No change

Exhaust Temperature (°F) [Specify the temperature of the exhaust leaving the stack]
No change

Distance to Nearest Property Line (ft) [Specify the distance from the base of the stack to the nearest property line.]

The project will not require new baghouse(s)150 feet to nearest property line

Height, Length and Width of Buildings (ft) [Specify the approximate dimensions of any buildings that are >40% of the stack height and are located within 5 building heights from the stack]

No new Buildings

#### Operation and Maintenance

Method Used to Establish Cleaning Frequency [Specify the method used to establish the duration between bag cleanings. If a timer is used, specify the timer setting and the criteria for selecting the time interval. If cleaning is actuated by the pressure differential, specify the criteria for selecting the pressure drop. Pressure differential -air to cloth ratio

Describe Preventive Maintenance [Specify the intended inspection frequencies for visible emissions -Daily, fallout - Daily and pressure drop across the filters - Monthly or as needed, viewing of the interior 'clean side' for leaks -Annually or as needed, filter wear and strength -Annually or as needed, assuring that the gauge is not plugged - Monthly. Also specify the records to be kept (e.g., records of all inspections and repairs, the age of each filter and its fabric type; amount of dust collected per month), and specify the spare parts to be kept on-site]Records include monthly inspections and repairs, the age of each filter and its fabric type; Extra filters, Cages pulse valve diaphragm are to be kept readily available

Methods Used to Prevent Emissions From Handling and Disposal of Dust [Specify the equipment, procedures, and methods used to prevent emissions from the handling and disposal of dust. Is the baghouse equipped with a rotary airlock? Is the receiving hopper completely enclosed? How is the dust hopper emptied without causing emissions?]

N/A - Dust from existing baghouses returned to the process conveyor or to bin